

**Neal, Arthur**

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**From:** FSConte@UCDavis.Edu  
**Sent:** Monday, April 10, 2006 1:52 PM  
**To:** NOSB Livestock  
**Subject:** Aquaculture Working Group Interim Final Report: Addendum  
**Attachments:** ATTACHMENT.TXT

The National Organic Standards Board  
c/o Valerie Francis  
Room 408 - South Building  
1400 & Independence Avenue, SW  
Washington, D.C. 20250-0001  
Re: NOSB Aquaculture Working Group Interim Final Report

Dear Ms. Frances:

I submitted comments addressing the NOSB Aquaculture Working Group Interim Final Report. by way of e-mail in a pdf letter. In that letter I made references to reviews surrounding the debate concerning the issue of fish and pain. Listed below are the four major reviews addressing that subject, including the original 2002 paper that stimulated the international debate.

I want to take advantage of the offer to submit additional background material. I did not include the references in the original letter, but feel that the NOSB review should have the references.. If it is appropriate, I will send PDF files of the reviews which can be reviewed by the Committee, but because they are in journals, it is not appropriate to display the full text on a public web site. Again, thank you for making provisions for this input.

**Chandroo, K.P., I.J.H. Duncan and R.D. Moccia. 2004.** Can fish suffer?: Perspectives on sentience, pain, fear and stress. Applied Animal Behaviour Science. 86: 225-250.

**Chandroo, K.P., S. Yue and R.D. Moccia. 2004.** An evaluation of current perspectives on consciousness and pain in fish. Fish and Fisheries. 5: 1-15.

**Huntingford, F.A., C. Adams, V.A. Braithwaite, S. Kadri, T.G. Pottinger, P. Sandoe, and J.F. Turnbull. 2006.** REVIEW PAPER: Current issues in fish welfare. J. Fish Biol. 68: 332-372.

**Rose, J.D. 2002.** The neurobehavioral nature of fishes and the question of awareness and pain. Rev. in Fisheries Sci. 10(1):1-38.

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4/11/2006

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